Sexual Behavior and Prioritizing Sexual Health among Inner-City Adolescents in a Small Urban Setting

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Background

- A number of sexual health messages and education programs for adolescents have been effective in delaying sexual intercourse and reducing unintended pregnancies and STDs.
- However, relatively few studies have examined perceptions of adolescents in terms of their sexual health needs.
- One pitfall of sexual health messages and education programs is they may be "tuned out" by adolescents if they are perceived as irrelevant, judgmental, or unimportant.
- Adolescents' perspectives about their sexual health needs must be studied and incorporated.

Objectives

- Utilizing data from a quantitative survey conducted among inner-city adolescents in Albany, New York, the objectives are:

  (1) to estimate the importance of sexual health as a health topic;

  (2) to determine whether sexual behavior is associated with prioritization of sexual health;

  (3) to identify predictors of whether an adolescent will prioritize health by sexual activity status.

- Specific questions include:

  (1) Among adolescents who are sexually active, is prioritization mainly due to increased level of sexual risk?

  (2) Among adolescents who are not sexually active, what predicts prioritization?

Methods

- The Albany Youth Health Survey (AYHS) was conducted to assess health needs of inner-city youth in the small urban setting of Albany, New York.
- A total of 432 male and female participants of a summer youth work program were interviewed on a number of health topics, including socio-demographics, sexual activity, drug and alcohol use, gang-related and other community violence, domestic and relationship violence, smoking, physical exercise, nutrition and diet.
- After providing basic socio-demographic information but before reporting information about specific health behaviors, participants were asked to choose the two personally most important health topics from the following list:

  (1) Diabetes/high blood pressure
  (2) Drugs/alcohol
  (3) Nutrition/exercise
  (4) Pregnancy/STDs/HIV
  (5) Violence

- These categories were chosen based on results from focus groups conducted among a similar population of Albany youth.
- The primary outcome of interest was whether participants chose pregnancy/STIs/HIV (referred to as 'sexual health') as one of the two most important health topics.
- Covariates were divided into three categories: (1) socio-demographic factors; (2) socio-environmental factors; and (3) behavioral factors.
- Univariate analysis described the primary outcome as well as the covariates.
- Prevalence ratios were calculated for each characteristic with the primary outcome; this analysis was performed for the entire population, and was also stratified by history of sexual activity (ever vs. never had vaginal, oral, or anal sex) and by sex (male vs. female).
- Predictive modeling using log-binomial regression was performed to identify the most parsimonious model with predictors statistically significant at a = 0.05.
- Log-binomial regression was used because of the high prevalence of the outcome (66%).
- Separate models were assessed for those participants who had been sexually active and those who had never had any type of sex.

Results

Figure 1. Prioritization of various health topics, stratified by sexual activity status (N=421)

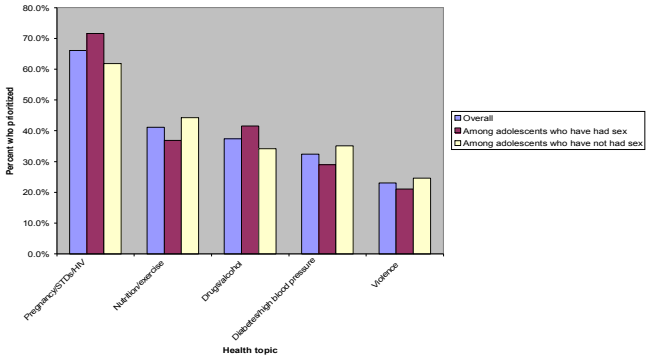

Table 1. Socio-demographic characteristics and prioritization of sexual health as a health topic, stratified by sexual activity status (N=421)

		Sexual health as a priority PR (95% CI)	
Socio-demographic characteristics	N (Percent)	Participants who had never had sex	Participants who ever had sex
Male sex	177 (42.0%)	0.77 (0.61, 0.97)	0.88 (0.72, 1.06)
Age			
14	100 (23.8%)	Ref	Ref
15	126 (29.9%)	1.09 (0.85, 1.41)	1.10 (0.75, 1.61)
16	98 (23.3%)	0.99 (0.74, 1.32)	1.13 (0.76, 1.66)
17	72 (17.1%)	1.04 (0.74, 1.47)	1.25 (0.86, 1.81)
18	25 (5.9%)	0.92 (0.50, 1.70)	1.40 (0.95, 2.07)
African-American and/or Hispanic	342 (81.2%)	1.48 (1.07, 2.05)	1.32 (0.92, 1.90)
Low-income status *	180 (47.2%)	1.22 (0.98, 1.52)	0.93 (0.76, 1.29)
Resident of a low-income zip code **	240 (59.3%)	1.32 (1.06, 1.64)	1.09 (0.87, 1.35)

* Low-income status defined as living in public housing, or having someone in the household who receives welfare, SSI, or food stamps.
** A low-income zip code is one with an average annual household income less than the 2000 US National Average. Four of the eight zip codes represented in the study are classified as low-income.

Table 2. Socio-environmental characteristics and prioritization of sexual health as a health topic, stratified by sexual activity status (N=421)

		Sexual health as a priority PR (95% CI)	
Socio-environmental characteristics	N (Percent)	Participants who never had sex	Participants who ever had sex
Resident of a high-risk neighborhood	143 (34.5%)	1.32 (1.08, 1.62)	1.09 (0.90, 1.31)
Not been talked to about sex by parent/guardian	64 (15.4%)	1.20 (0.95, 1.51)	1.17 (0.95, 1.45)
Location and company not always known by parent/guardian	233 (55.3%)	0.90 (0.73, 1.11)	1.20 (0.97, 1.48)
Does not have a curfew	136 (32.6%)	0.91 (0.72, 1.14)	0.95 (0.77, 1.16)
Not very close to mother	164 (39.1%)	1.14 (0.93, 1.40)	1.31 (1.09, 1.58)
Not very close to father	291 (70.0%)	1.23 (0.97, 1.56)	1.08 (0.85, 1.37)
Ever been slapped, shoved, hit, or physically hurt by an adult family member	175 (41.9%)	1.16 (0.95, 1.42)	1.09 (0.90, 1.32)
Ever been slapped, shoved, hit, or physically hurt by a boyfriend, girlfriend, or sex partner	49 (11.6%)	1.16 (0.72, 1.88)	1.18 (0.98, 1.42)
Ever forced to have any type of sexual activity	33 (7.9%)	0.85 (0.40, 1.62)	1.14 (0.92, 1.42)

Table 3. Sexual behaviors and prioritization of sexual health as a health topic among sexually active participants (N=421)

Sexual behaviors	N (Percent)	Sexual health as a priority among participants who reported having had sex PR (95% CI)
Ever had vaginal sex	147 (35.7%)	1.08 (0.82, 1.41)
Ever had oral sex	125 (30.4%)	1.02 (0.82, 1.27)
Ever had anal sex	27 (6.5%)	1.09 (0.87, 1.38)
Ever had vaginal, oral, or anal sex	182 (43.4%)	NA
Number of heterosexual partners		
1	43 (25.0%)	Ref
2 to 5	90 (52.3%)	1.34 (0.99, 1.81)
6 or more	39 (22.7%)	1.59 (1.17, 2.14)
Never used a condom	20 (11.1%)	0.90 (0.65, 1.26)
Did not use a condom at last sex act	44 (27.3%)	0.98 (0.79, 1.23)
Does not use condom at ever sex act	85 (47.0%)	0.95 (0.79, 1.15)
Ever been pregnant (among females)	19 (7.9%)	1.25 (1.01, 1.54)
Ever had an abortion (among females)	13 (5.3%)	1.13 (0.87, 1.48)
Ever thought had an STI	23 (12.6%)	1.33 (1.13, 1.57)
Ever diagnosed with an STI	17 (9.4%)	1.36 (1.16, 1.59)

- In the final predictive model for participants who had never had sex, the only variable to remain in the model was race (PR 1.47, 95% CI 1.06, 2.07).
- The covariates that remained in the final predictive model for participants who had ever had sex were not being close to the mother (PR 1.23, 95% CI 1.15, 2.07) and increasing number of heterosexual partners (PR 1.55, 95% CI 1.15, 2.07 for 2 to 5 vs. 1 partner; PR 2.39, 95% CI 1.33, 4.30 for 6 or more vs. 1 partner)

Conclusions and implications

- Prioritizing sexual health was more common among sexually active compared to non-sexually active adolescents; however, it was highly prioritized by both.
- Prioritization was primarily related to behavioral risk (number of heterosexual partners) and maternal relationship among sexually active teens, while socio-demographics, specifically race/ethnicity, was a determinant among non-sexually active teens.
- Programs and interventions that incorporate teens' health priorities may be more effective.